

If Crop Insurance is Working, then is Disaster Aid Necessary?

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**If the Insurance Program is
working, and USDA says that
it is working, then why do
farmers “need” disaster aid?**

New Safety Net

- **Direct (Fixed) Payments**
- **Marketing Loans and Loan Deficiency Payments**
- **Counter-Cyclical Payments**
- **Crop Insurance**

Table 1. Net Revenue under Current Agricultural Policy from Sales, Government Payments, Crop Insurance, a Market Price Increase and a 35% Yield loss

#		No	CAT	MPCI	CRC	RA-	RA
4	Sales	205.35	205.35	205.35	205.35	205.35	205.35
Government Payments							
8	% Yield Lost of Planted Crop	35%	35%	35%	35%	35%	35%
12	Counter Cyclical Pymt * 85%	0.00	0.00	0.00	0.00	0.00	0.00

Table 1. Net Revenue under Current Agricultural Policy from Sales, Government Payments, Crop Insurance, a Market Price Increase and a 35% Yield loss

#		No	CAT	MPCI	CRC	RA-	RA
4	Sales	205.35	205.35	205.35	205.35	205.35	205.35
Government Payments							
8	% Yield Lost of Planted Crop	35%	35%	35%	35%	35%	35%
12	Counter Cyclical Pymt * 85%	0.00	0.00	0.00	0.00	0.00	0.00
14	Direct Pymt * 85% * DPY	28.56	28.56	28.56	28.56	28.56	28.56

Table 1. Net Revenue under Current Agricultural Policy from Sales, Government Payments, Crop Insurance, a Market Price Increase and a 35% Yield loss

#	No	CAT	MPCI	CRC	RA-	RA
4 Sales	205.35	205.35	205.35	205.35	205.35	205.35
Government Payments						
8 % Yield Lost of Planted Crop	35%	35%	35%	35%	35%	35%
12 Counter Cyclical Pymt * 85%	0.00	0.00	0.00	0.00	0.00	0.00
14 Direct Pymt * 85% * DPY	28.56	28.56	28.56	28.56	28.56	28.56
15 LDP Pymt	0.00	0.00	0.00	0.00	0.00	0.00
17 Total Government Payments	28.56	28.56	28.56	28.56	28.56	28.56
Crop Insurance						
19 Coverage Level		50%	75%	75%	75%	75%
29 Net Indemnity Payment		0.00	20.25	24.18	24.18	17.65

Table 1. Net Revenue under Current Agricultural Policy from Sales, Government Payments, Crop Insurance, a Market Price Increase and a 35% Yield loss

#	No	CAT	MPCI	CRC	RA-	RA
4 Sales	205.35	205.35	205.35	205.35	205.35	205.35
Government Payments						
8 % Yield Lost of Planted Crop	35%	35%	35%	35%	35%	35%
12 Counter Cyclical Pymt * 85%	0.00	0.00	0.00	0.00	0.00	0.00
14 Direct Pymt * 85% * DPY	28.56	28.56	28.56	28.56	28.56	28.56
15 LDP Pymt	0.00	0.00	0.00	0.00	0.00	0.00
17 Total Government Payments	28.56	28.56	28.56	28.56	28.56	28.56
Crop Insurance						
19 Coverage Level		50%	75%	75%	75%	75%
29 Net Indemnity Payment		0.00	20.25	24.18	24.18	17.65
30 Net Revenue Lost\Gain	233.91	233.91	254.16	258.09	258.09	251.56

Table 1. Net Revenue under Current Agricultural Policy from Sales, Government Payments, Crop Insurance, a Market Price Increase and a 35% Yield loss

#	No	CAT	MPCI	CRC	RA-	RA
4 Sales	205.35	205.35	205.35	205.35	205.35	205.35
Government Payments						
8 % Yield Lost of Planted Crop	35%	35%	35%	35%	35%	35%
12 Counter Cyclical Pymt * 85%	0.00	0.00	0.00	0.00	0.00	0.00
14 Direct Pymt * 85% * DPY	28.56	28.56	28.56	28.56	28.56	28.56
15 LDP Pymt	0.00	0.00	0.00	0.00	0.00	0.00
17 Total Government Payments	28.56	28.56	28.56	28.56	28.56	28.56
Crop Insurance						
19 Coverage Level		50%	75%	75%	75%	75%
29 Net Indemnity Payment		0.00	20.25	24.18	24.18	17.65
30 Net Revenue Lost\Gain	233.91	233.91	254.16	258.09	258.09	251.56
31 Expected Revenue³	317.82	317.82	317.82	317.82	317.82	317.82
32 Net Revenue Lost\Gain	(83.91)	(83.91)	(63.66)	(59.73)	(59.73)	(66.26)

Total Loss

- Insured farmers are better off with Zero Yield than a 35% Loss

Table 2. Net Revenue under Current Agricultural Policy from Sales, Government Payments, Crop Insurance, a Market Price Increase and a 100% Yield loss

#	No	CAT	MPCI	CRC	RA-	RA
4 Sales	0.00	0.00	0.00	0.00	0.00	0.00
Government Payments						
8 % Yield Lost of Planted Crop	100%	100%	100%	100%	100%	100%
12 Counter Cyclical Pymt * 85%	0.00	0.00	0.00	0.00	0.00	0.00
14 Direct Pymt * 85% * DPY	28.56	28.56	28.56	28.56	28.56	28.56
15 LDP Pymt	0.00	0.00	0.00	0.00	0.00	0.00
17 Total Government Payments	28.56	28.56	28.56	28.56	28.56	28.56
Crop Insurance						
19 Coverage Level		50%	75%	75%	75%	75%
29 Net Indemnity Payment		80.04	193.54	242.53	242.53	223.00

Table 2. Net Revenue under Current Agricultural Policy from Sales, Government Payments, Crop Insurance, a Market Price Increase and a 100% Yield loss

#	No	CAT	MPCI	CRC	RA-	RA
4 Sales	0.00	0.00	0.00	0.00	0.00	0.00
Government Payments						
8 % Yield Lost of Planted Crop	100%	100%	100%	100%	100%	100%
12 Counter Cyclical Pymt * 85%	0.00	0.00	0.00	0.00	0.00	0.00
14 Direct Pymt * 85% * DPY	28.56	28.56	28.56	28.56	28.56	28.56
15 LDP Pymt	0.00	0.00	0.00	0.00	0.00	0.00
17 Total Government Payments	28.56	28.56	28.56	28.56	28.56	28.56
Crop Insurance						
19 Coverage Level		50%	75%	75%	75%	75%
29 Net Indemnity Payment		80.04	193.54	242.53	242.53	223.00
30 Net Revenue Lost\Gain	28.56	108.60	222.10	271.09	271.09	251.56
31 Expected Revenue ³	317.82	317.82	317.82	317.82	317.82	317.82
32 Net Revenue Lost\Gain	(289.26)	(209.22)	(95.72)	(46.73)	(46.73)	(66.26)

Old Disaster Program

- Insured farmers combined with the 98 Disaster Program and a Zero Yield would Exceed Expected Revenue

Table 3. Net Revenue from Traditional Disaster Aid, Sales, Government Payments, Crop Insurance, a Market Price Increase and a 100% Yield loss

#	No	CAT	MPCI	CRC	RA-	RA
4 Sales	0.00	0.00	0.00	0.00	0.00	0.00
Government Payments						
8 % Yield Lost of Planted Crop	100%	100%	100%	100%	100%	100%
11 TDA Payment	103.97	112.64	112.64	112.64	112.64	112.64
12 Counter Cyclical Pymt * 85%	0.00	0.00	0.00	0.00	0.00	0.00
14 Direct Pymt * 85% * DPY	28.56	28.56	28.56	28.56	28.56	28.56
15 LDP Pymt	0.00	0.00	0.00	0.00	0.00	0.00
17 Total Government Payments	132.53	141.20	141.20	141.20	141.20	141.20
Crop Insurance						
19 Coverage Level		50%	75%	75%	75%	75%
29 Net Indemnity Payment		80.04	193.54	242.53	242.53	223.00
30 Net Revenue Lost\Gain	132.53	221.24	334.74	383.73	383.73	364.20
31 Expected Revenue⁴	317.82	317.82	317.82	317.82	317.82	317.82
32 Net Revenue Lost\Gain	(185.29)	(96.58)	16.92	65.91	65.91	46.38

The public policy alternatives to address the hole in the safety net include:

- 1. Status quo, no ad hoc disaster aid**
- 2. % direct payments to growers regardless of yield losses**
- 3. An indemnity bonus payment**
- 4. An increased crop insurance coverage level with no added premiums**
- 5. Companion disaster aid targeted to the insurance deductible**

The public policy alternatives to address the hole in the safety net include:

- 6. Zero/92 would place a second trigger on the counter cyclical payment**
- 7. A “free” market policy**
- 8. Other alternatives.**
- 9. Traditional disaster aid payments that require a 35% yield loss**

65/50 Disaster Aid

- Coverage set at 65% of “Historical Yield
- Pays 50% of the MPCI Price on lost Production, 45% for uninsured
- CAP on Payments

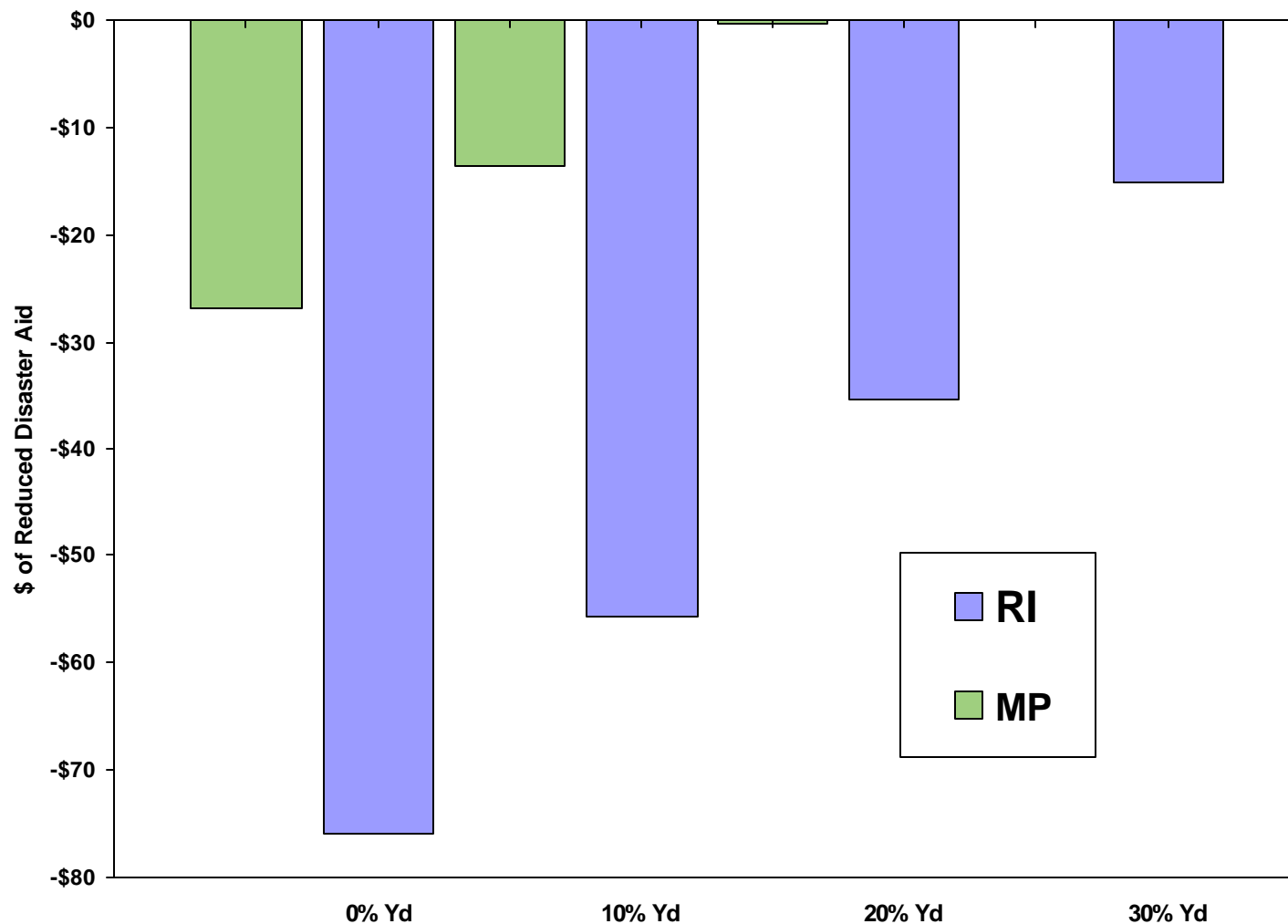
Disaster Aid CAP

- Disaster Aid + Crop Insurance + Production “Value” cannot Exceed “Expected Crop Value”
- Past CAP based on MPCl Price Election
- $APH \times MPCl \text{ Price Election} \times 95\%$

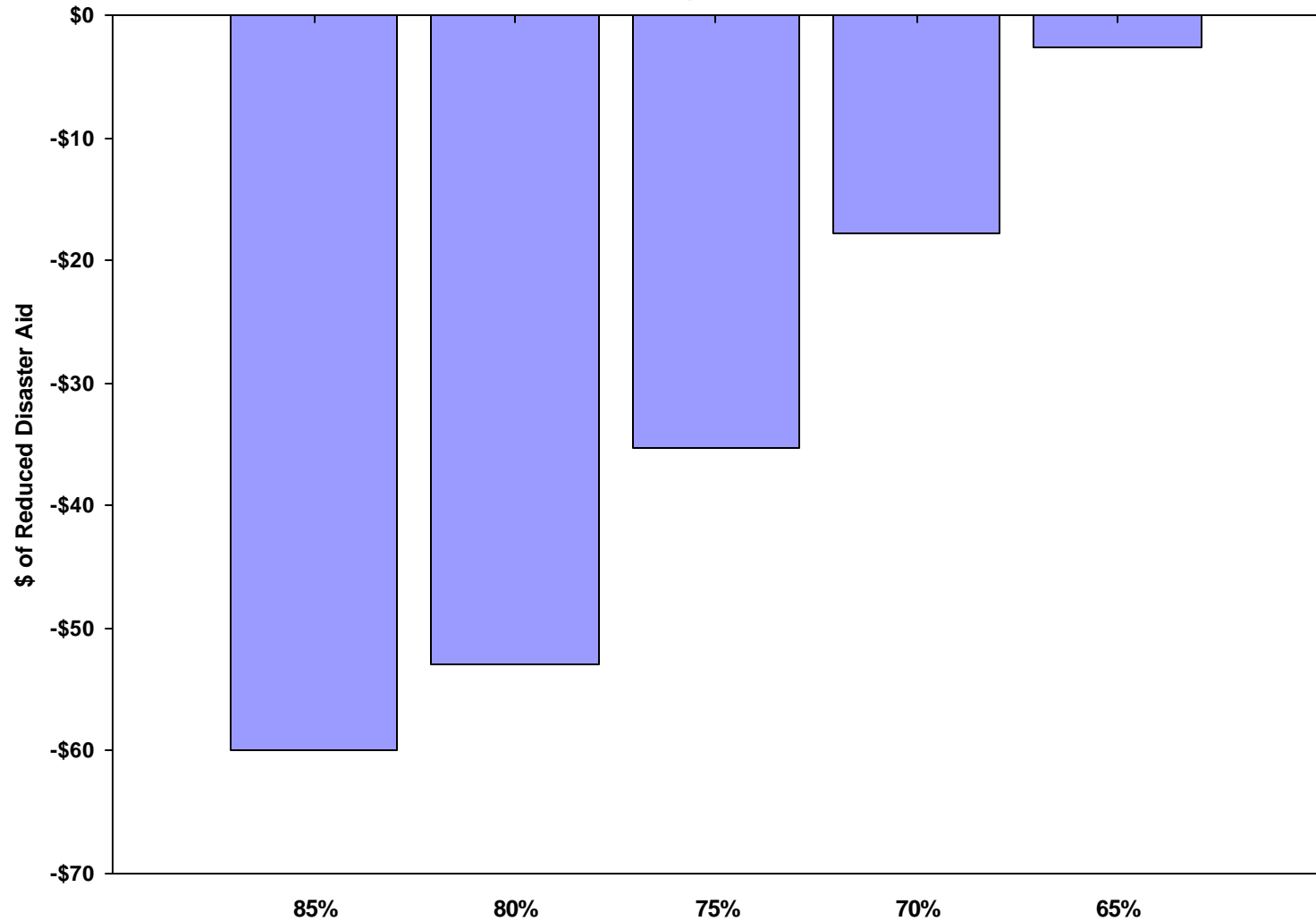
Table 1. Net Revenue from 65/50 Disaster Aid, Sales, Government Pymts, Crop Insurance, a Market Price Increase and a 80% Yield loss & a \$2.00 CAP

#	No	CAT	MPCI	CRC	RA-	RA
4 Sales	63.18	63.18	63.18	63.18	63.18	63.18
Government Payments						
5 Disaster Coverage Level	65%	65%	65%	65%	65%	65%
7 Max TDA Pymt ¹	77.98	86.65	86.65	86.65	86.65	86.65
8 % Yield Lost of Planted Crop	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
11 TDA Payment	53.99	59.99	59.99	59.99	59.99	59.99
14 Direct Pymt * 85% * DPY	28.56	28.56	28.56	28.56	28.56	28.56
17 Total Government Payments	82.55	88.55	88.55	88.55	88.55	88.55
Crop Insurance						
19 Coverage Level		50%	75%	75%	75%	75%
29 Net Indemnity Payment		48.05	140.22	175.35	175.35	155.82
30 CI + Yield + Disaster	107.31	161.35	253.53	288.65	288.65	269.12
31 CAP on Disaster & CI & Yield	253.27	253.27	253.27	253.27	253.27	253.27
32 CAP REDUCTION ⁴	0.00	0.00	(0.26)	(35.38)	(35.38)	(15.85)
33 Net Payments	53.99	108.03	199.95	199.95	199.95	199.95
34 Net Revenue Lost\Gain	145.73	199.78	291.69	291.69	291.69	291.69
35 Expected Revenue ⁵	317.82	317.82	317.82	317.82	317.82	317.82
36 Net Revenue Lost\Gain	(172.09)	(118.04)	(26.13)	(26.13)	(26.13)	(26.13)

Reduction in Disaster Aid for 75% MPCl & RI with \$2 CAP under Different Yield Losses



Reduction in Disaster Aid with an 80% Yield Loss for RI Under Different Coverage Levels with \$2 CAP



65/50 Disaster Aid

- Does not cover the “Hole” in the Farm Safety Net, No payment to Growers with a 35% yield loss
- Targets payments to total loss that could have been insured.
- CAP reduces payments to highly insured farmers, giving an incentive to buy less coverage.

Table 2. Net Revenue from 65/50 Disaster Aid, Sales, Government Pymts, Crop Insurance, a Market Price Increase and a 80% Yield loss & a \$2.52 CAP

#	No	CAT	MPCI	CRC	RA-	RA
4 Sales	63.18	63.18	63.18	63.18	63.18	63.18
Government Payments						
5 Disaster Coverage Level	65%	65%	65%	65%	65%	65%
7 Max TDA Pymt ¹	77.98	86.65	86.65	86.65	86.65	86.65
8 % Yield Lost of Planted Crop	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
11 TDA Payment	53.99	59.99	59.99	59.99	59.99	59.99
14 Direct Pymt * 85% * DPY	28.56	28.56	28.56	28.56	28.56	28.56
17 Total Government Payments	82.55	88.55	88.55	88.55	88.55	88.55
Crop Insurance						
19 Coverage Level		50%	75%	75%	75%	75%
29 Net Indemnity Payment		48.05	140.22	175.35	175.35	155.82
30 CI + Yield + Disaster	121.17	175.22	267.39	302.52	302.52	282.99
31 CAP on Disaster & CI & Yield	319.12	319.12	319.12	319.12	319.12	319.12
32 CAP REDUCTION ⁴	0.00	0.00	0.00	0.00	0.00	0.00
33 Net Payments	53.99	108.03	200.21	235.33	235.33	215.80
34 Net Revenue Lost\Gain	145.73	199.78	291.95	327.08	327.08	307.55
35 Expected Revenue ⁵	317.82	317.82	317.82	317.82	317.82	317.82
36 Net Revenue Lost\Gain	(172.09)	(118.04)	(25.87)	9.25	9.25	(10.28)

Figure 1. % of Insured Wheat Ac by Coverage Level for 1996 vs. 2002, in Cheyenne, Greeley, Hamilton, Morton, Sherman, Stanton, and Wallace Counties, Kansas

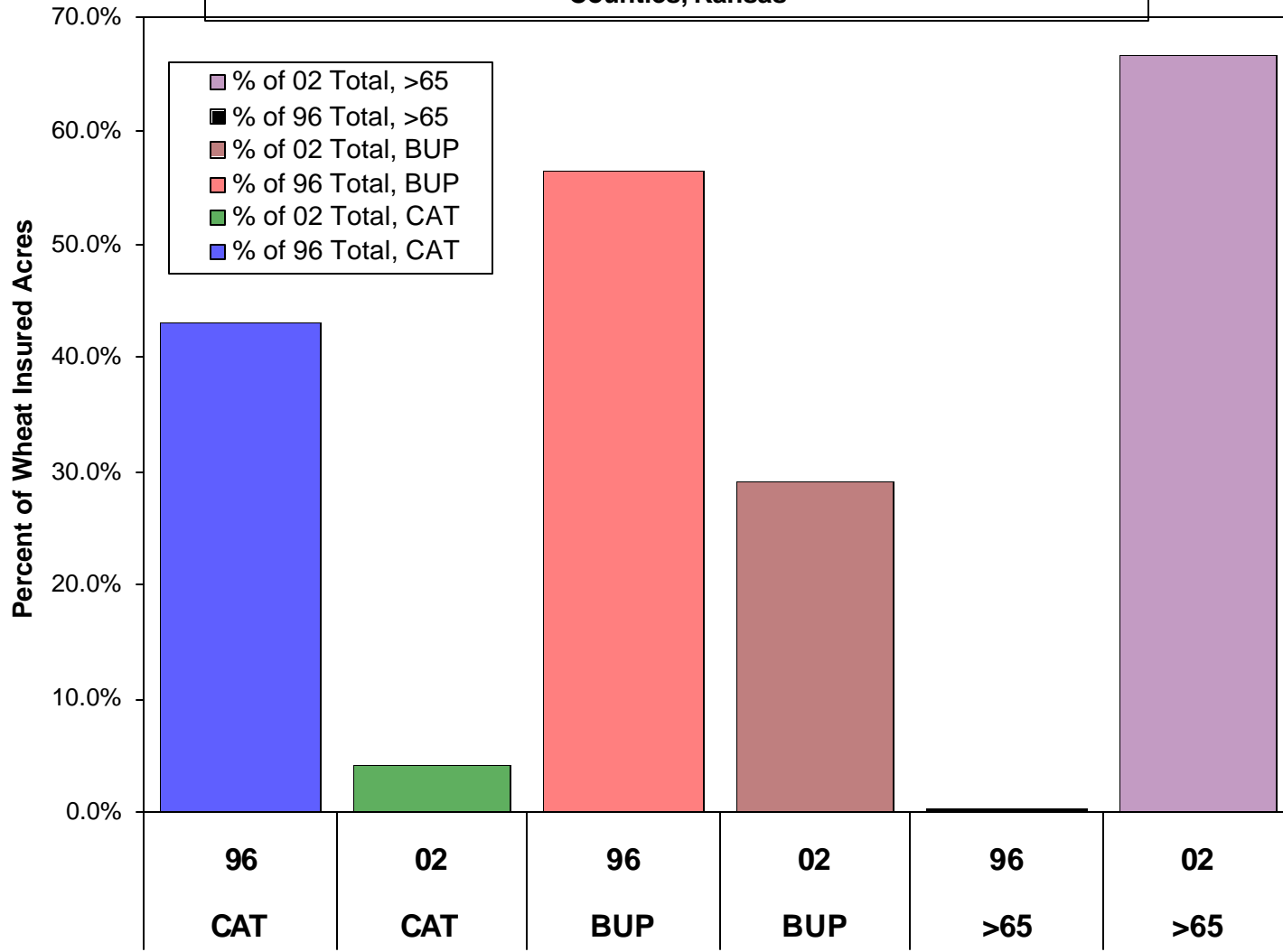


Table 4. Net Revenue from Senate Disaster Aid, Sales, Government Payments, a Market Price Increase and a 35% Yield loss

#	No	CAT	MPCI	CRC	RA-	RA
4 Sales	205.35	205.35	205.35	205.35	205.35	205.35
Government Payments						
8 % Yield Lost of Planted Crop	35%	35%	35%	35%	35%	35%
12 Counter Cyclical Pymt * 85%	0.00	0.00	0.00	0.00	0.00	0.00
14 Direct Pymt * 85% * DPY	28.56	28.56	28.56	28.56	28.56	28.56
15 LDP Pymt	0.00	0.00	0.00	0.00	0.00	0.00
16 Senate Disaster Payment	12.28	12.28	12.28	12.28	12.28	12.28
17 Total Government Payments	40.84	40.84	40.84	40.84	40.84	40.84
Crop Insurance						
19 Coverage Level		50%	75%	75%	75%	75%
29 Net Indemnity Payment		0.00	20.25	24.18	24.18	17.65
30 Net Revenue Lost\Gain	246.19	246.19	266.44	270.37	270.37	263.84
31 Expected Revenue ⁴	317.82	317.82	317.82	317.82	317.82	317.82
32 Net Revenue Lost\Gain	(71.63)	(71.63)	(51.38)	(47.45)	(47.45)	(53.98)

Table 5. Net Revenue from Disaster Aid based on a Bonus Indemnity Payment, Sales, Government Payments, Crop Insurance, a Market Price Increase and a 35% Yield loss

#	No	CAT	MPCI	CRC	RA-	RA
4 Sales	205.35	205.35	205.35	205.35	205.35	205.35
Government Payments						
8 % Yield Lost of Planted Crop	35%	35%	35%	35%	35%	35%
12 Counter Cyclical Pymt * 85%	0.00	0.00	0.00	0.00	0.00	0.00
14 Direct Pymt * 85% * DPY	28.56	28.56	28.56	28.56	28.56	28.56
15 LDP Pymt	0.00	0.00	0.00	0.00	0.00	0.00
16 Disaster Pymt = 20% of Indemnity ¹	0.00	0.00	5.34	6.73	6.73	5.33
17 Total Government Payments	28.56	28.56	33.90	35.29	35.29	33.89
Crop Insurance						
19 Coverage Level		50%	75%	75%	75%	75%
29 Net Indemnity Payment		0.00	20.25	24.18	24.18	17.65
30 Net Revenue Lost\Gain	233.91	233.91	259.50	264.82	264.82	256.89
31 Expected Revenue ⁴	317.82	317.82	317.82	317.82	317.82	317.82
32 Net Revenue Lost\Gain	(83.91)	(83.91)	(58.32)	(53.00)	(53.00)	(60.93)

Table 6. Net Revenue from Disaster Aid based on 10% Increase in CI Coverage, Sales, Government Payments, Crop Insurance, a Market Price Increase and a 35% Yield loss

#	No	CAT	MPCI	CRC	RA-	RA
4 Sales	205.35	205.35	205.35	205.35	205.35	205.35
Government Payments						
8 % Yield Lost of Planted Crop	35%	35%	35%	35%	35%	35%
12 Counter Cyclical Pymt * 85%	0.00	0.00	0.00	0.00	0.00	0.00
14 Direct Pymt * 85% * DPY	28.56	28.56	28.56	28.56	28.56	28.56
15 LDP Pymt	0.00	0.00	0.00	0.00	0.00	0.00
16 10% Increased CI Coverage	0.00	0.00	26.60	32.76	32.76	30.16
17 Total Government Payments	28.56	28.56	55.16	61.32	61.32	58.72
Crop Insurance						
19 Coverage Level		50%	75%	75%	75%	75%
29 Net Indemnity Payment		0.00	20.25	24.18	24.18	17.65
30 Net Revenue Lost\Gain	233.91	233.91	280.76	290.85	290.85	281.72
31 Expected Revenue ³	317.82	317.82	317.82	317.82	317.82	317.82
32 Net Revenue Lost\Gain	(83.91)	(83.91)	(37.06)	(26.97)	(26.97)	(36.10)

Table 7. Net Revenue from Companion Disaster Aid Program (CDAP), Sales, Crop Insurance, a Market Price Increase and a 35% Yield loss

#	No	CAT	MPCI	CRC	RA-	RA
4 Sales	205.35	205.35	205.35	205.35	205.35	205.35
Government Payments						
5 Disaster Coverage Level	80%	80%	80%	80%	80%	80%
8 % Yield Lost of Planted Crop	35%	35%	35%	35%	35%	35%
9 Companion Pymt Level	3	3	3	3	3	3
10 % Coverage Paid	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%
11 Companion Zero/92 Payment	20.27	20.27	20.27	20.27	20.27	20.27
12 Counter Cyclical Pymt * 85%	0.00	0.00	0.00	0.00	0.00	0.00
14 Direct Pymt * 85% * DPY	28.56	28.56	28.56	28.56	28.56	28.56
15 LDP Pymt	0.00	0.00	0.00	0.00	0.00	0.00
17 Total Government Payments	48.83	48.83	48.83	48.83	48.83	48.83
Crop Insurance						
19 Coverage Level		50%	75%	75%	75%	75%
29 Net Indemnity Payment		0.00	20.25	24.18	24.18	17.65
30 Net Revenue Lost\Gain	254.18	254.18	274.43	278.37	278.37	271.83
31 Expected Revenue ⁴	317.82	317.82	317.82	317.82	317.82	317.82
32 Net Revenue Lost\Gain	(63.64)	(63.64)	(43.39)	(39.45)	(39.45)	(45.99)

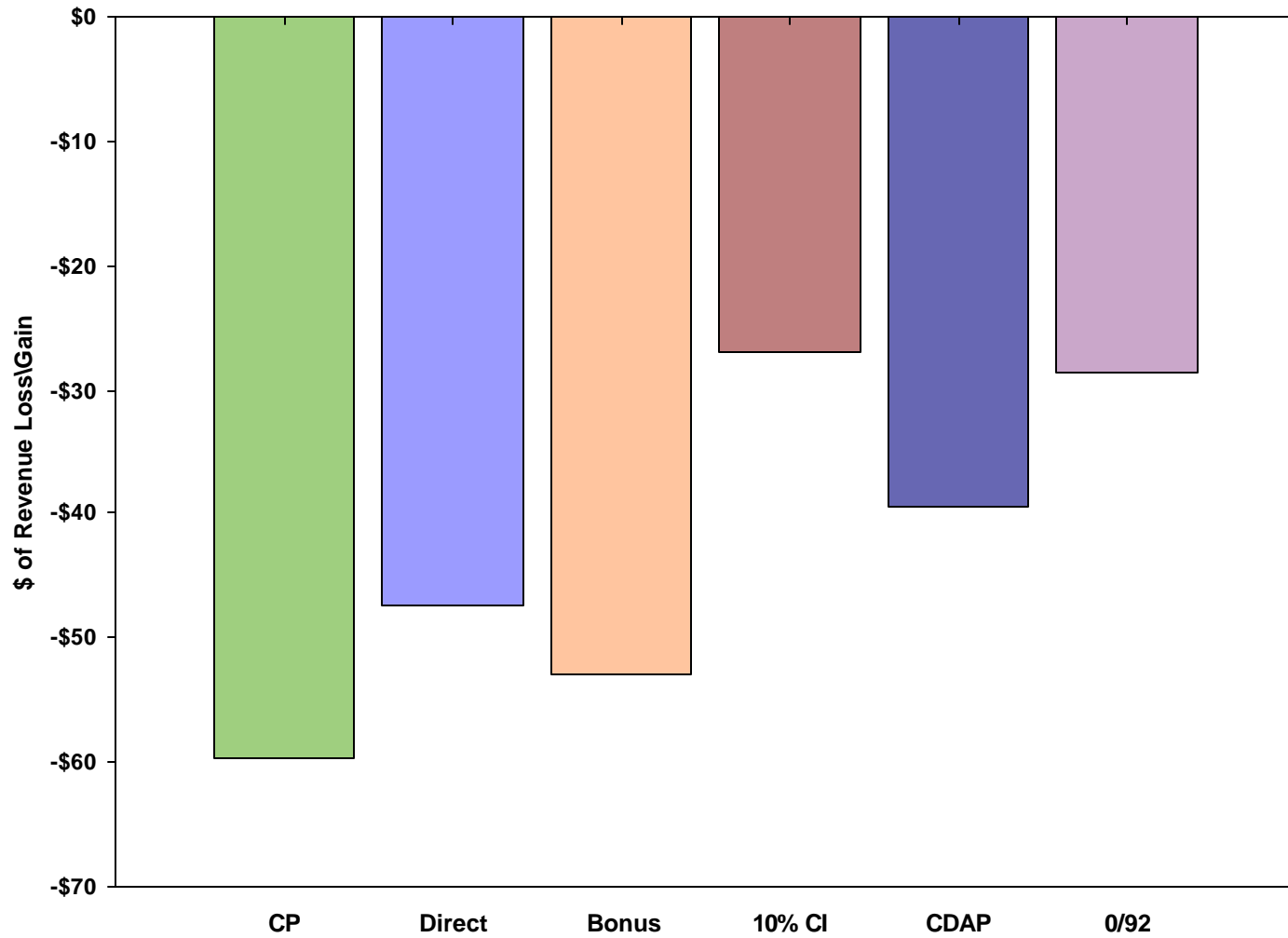
Table 8. Net Revenue from Companion Disaster Aid Program (CDAP), Sales, Crop Insurance, a Market Price Increase and a 53% Yield loss

#	No	CAT	MPCI	CRC	RA-	RA
4 Sales	147.43	147.43	147.43	147.43	147.43	147.43
Government Payments						
5 Disaster Coverage Level	80%	80%	80%	80%	80%	80%
8 % Yield Lost of Planted Crop	53%	53%	53%	53%	53%	53%
9 Companion Pymt Level	3	3	3	3	3	3
10 % Coverage Paid	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
11 Companion Zero/92 Payment	45.06	45.06	45.06	45.06	45.06	45.06
12 Counter Cyclical Pymt * 85%	0.00	0.00	0.00	0.00	0.00	0.00
14 Direct Pymt * 85% * DPY	28.56	28.56	28.56	28.56	28.56	28.56
15 LDP Pymt	0.00	0.00	0.00	0.00	0.00	0.00
17 Total Government Payments	73.62	73.62	73.62	73.62	73.62	73.62
Crop Insurance						
19 Coverage Level		50%	75%	75%	75%	75%
29 Net Indemnity Payment		5.39	69.13	85.77	85.77	75.57
30 Net Revenue Lost\Gain	221.05	226.44	290.17	306.81	306.81	296.62
31 Expected Revenue ⁴	317.82	317.82	317.82	317.82	317.82	317.82
32 Net Revenue Lost\Gain	(96.78)	(91.38)	(27.65)	(11.01)	(11.01)	(21.21)

Table 9. Net Revenue from Zero/92, Sales, Government Payments, Crop Insurance, a Market Price Increase and a 35% Yield loss

#	No	CAT	MPCI	CRC	RA-	RA
4 Sales	205.35	205.35	205.35	205.35	205.35	205.35
Government Payments						
5 Disaster Coverage Level	92%	92%	92%	92%	92%	92%
8 % Yield Lost of Planted Crop	35%	35%	35%	35%	35%	35%
9 Companion Pymt Level	3	3	3	3	3	3
10 % Coverage Paid	81.0%	81.0%	81.0%	81.0%	81.0%	81.0%
11 Companion Zero/92 Payment	31.20	31.20	31.20	31.20	31.20	31.20
12 Counter Cyclical Pymt * 85%	0.00	0.00	0.00	0.00	0.00	0.00
14 Direct Pymt * 85% * DPY	28.56	28.56	28.56	28.56	28.56	28.56
15 LDP Pymt	0.00	0.00	0.00	0.00	0.00	0.00
17 Total Government Payments	59.76	59.76	59.76	59.76	59.76	59.76
Crop Insurance						
19 Coverage Level		50%	75%	75%	75%	75%
29 Net Indemnity Payment		0.00	20.25	24.18	24.18	17.65
30 Net Revenue Lost\Gain	265.11	265.11	285.36	289.30	289.30	282.76
31 Expected Revenue ⁴	317.82	317.82	317.82	317.82	317.82	317.82
32 Net Revenue Lost\Gain	(52.71)	(52.71)	(32.46)	(28.52)	(28.52)	(35.06)

Compare Policies with a 35% Yield Loss



Private Sector Products?

- **1. Insure crop loss from 75% to 90%**
CRC Plus
Cargill A+
85% Coverage Reduced Demand
- **2. Buy Calls to lock in CC payment**
- **3. 100% Hedge**
- **4. Weather Derivatives**
- **5. Subsidies Favor Option Units in C**

Thank You

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